

ATTACHMENT C

TOWN OF  
GULF STREAM

John C. Randolph  
Attorney  
561-650-0458  
Fax: 561-650-5300  
jrandolph@jonesfoster.com

October 11, 2016

Ms. Michele Visconti  
Sr. Network Real Estate Specialist  
Mobilitie, LLC  
3475 Piedmont Road NE, Suite 1000  
Atlanta, Georgia 30305

Re: Town of Gulf Stream  
Our File No. 13147.1

Dear Ms. Visconti:

Your letter dated August 3, 2016, addressed to the Town of Gulf Stream was referred to this office for review.

In your letter you request a preliminary review of Mobilitie LLC's application and site plan in order to allow the Town to provide you with all requirements needed to obtain a right-of-way permit in Gulf Stream for your facility. You further indicate in your letter that Mobilitie plans to construct the applied for utility infrastructure within the next twelve months.

I call your attention to Section 34-103 of the Town Code which provides as follows:

**"Sec. 34-103. - Poles, overhead wires and associated structures unlawful.**

Except as otherwise specifically provided in this article, all facilities for providing electrical power, telecommunications, video, cable television, internet, broadband, and similar services (collectively, as used herein, "utility facilities") located within the jurisdiction of the town shall be placed underground. Poles, overhead wires and associated overhead structures shall not be permitted except as specifically provided in this article.

This section shall apply to all new utilities located or desiring to locate within town or state rights-of-way within the town, as well as in easements or on private properties, as well as to any relocation, refurbishment, reconstruction, or restoration of utilities already located within the town, except for temporary restoration of service under emergency conditions, e.g., following a hurricane or similar natural event that damages overhead utility facilities."

Ms. Michele Visconti  
October 11, 2016  
Page 2

The purpose of undergrounding these facilities is to provide the Town's residents with a safer, more reliable and aesthetically pleasing system.

You indicate in your letter that Gulf Stream Code Section 34-108(3) provides that your infrastructure is an enumerated exception to the underground requirement "and as such permitted to be erected in Gulf Stream." Indeed, that Section does provide that radio antennae, associated equipment and supporting structures for such antennae, used by a utility company for furnishing wireless communication services shall be approved and permitted as required by the town. [Emphasis supplied.]

Your proposed construction falls within the classification of a wireless communication facility. Attached hereto is a copy of Gulf Stream Code Section 66-456 relating to wireless communications towers and antennas. Please note in Section (1) that although towers to support wireless communications antennas designed primarily for the purpose of serving residents of the Town of Gulf Stream may be permitted within Town owned property, subject to the conditions stated therein, there is no provision to site a tower to support wireless communication antennas on the rights-of-way within the Town.

Therefore, because the Town code does not allow a new telecommunication tower or pole for wireless communications facilities to be in the Town's right-of-way, your request is denied.

In the event you have any questions in regard to this matter, please do not hesitate to contact me.

Sincerely,

JONES, FOSTER, JOHNSTON & STUBBS, P.A.

By   
John C. Randolph

JCR/ssm

Enclosure

cc: Mr. William H. Thrasher, Town Manager

p:\docs\13147\00001\ltr\1q\9211.docx

## DIVISION 8. - WIRELESS COMMUNICATIONS TOWERS AND ANTENNAS

## Sec. 66-456. - Wireless communications towers and antennas.

The Town of Gulf Stream finds that it is in the public interest to limit the siting of wireless communications towers and antennas within the municipal boundaries of the town. The following conditions shall apply:

- (1) A tower to support wireless communications antennas, designed primarily for the purpose of serving residents of the Town of Gulf Stream, may be permitted within the town-owned property subject, however, to the tower being available for use jointly to provide public safety communications and further subject to a license or lease authorizing the use of said tower having been approved by the town commission.
  - a. Any lease of the tower referenced herein shall be subject to terms and conditions satisfactory to and approved by the town commission.
- (2) Wireless communications antennas shall be permitted on towers as provided for in subsection (1) or lightpole structures located in rights-of-way or easements within the town subject to the following conditions:
  - a. The height of the antenna cannot exceed two feet above the existing lightpole structure.
  - b. All lightpole-mounted antennas shall be of a stealth design so that they are architecturally designed or camouflaged to be compatible with surrounding land uses, except that such antennas located in residential zoned areas must be screened from the view of residents and pedestrians.
  - c. Equipment cabinets associated with lightpole-mounted antennas shall be of a scale that makes them no more visually obtrusive than other types of utility equipment boxes normally located within the rights-of-way within the town; and architecturally designed or camouflaged to be compatible with surrounding land uses, except that such equipment cabinets located in residential zoned areas must be screened from the view of residents and pedestrians.
  - d. The town must approve the noise level and location of any generators or other equipment.
- (3) Applicants may request a permit to site a wireless communications antenna upon the following conditions:
  - a. Payment of a non-refundable application fee of \$1,000.00.

- b. Provide to the town's building official an inventory of the applicant's existing towers, antennas, or sites approved for towers or antennas that provide service or coverage within the Town of Gulf Stream, including specific information about the location, height, and design of each tower, antenna or site.
  - c. All costs relating to the installation of the antenna or any ancillary equipment relating thereto shall be borne by the applicant.
  - d. Space availability shall be on a first come-first served basis.
- (4) No tower or antenna shall be permitted in the Town of Gulf Stream, except pursuant to subsections (1), (2), and (3) above, unless the applicant demonstrates to the reasonable satisfaction of the town commission that no reasonable alternative exists that can accommodate the applicant's proposed telecommunications service. An applicant shall submit information requested by the town commission relating to the availability of suitable existing towers, other structures or alternative technology. Evidence to demonstrate that no existing tower, structure or alternative technology can accommodate the applicant's proposed service may consist of any of the following:
- a. No existing towers or structures located within the relevant geographic area accommodate antennas adequate to provide the applicant's service within the Town of Gulf Stream.
  - b. The applicant demonstrates to the satisfaction of the town commission that there are other limiting factors that render existing towers and structures unsuitable.
  - c. The applicant demonstrates that an alternative technology, such as a cable microcell network using multiple low-powered transmitters/receivers attached to a wire line system, is unsuitable.
- (5) Special exceptions. If the town commission determines that no reasonable alternative exists that can accommodate the applicant's proposed telecommunications service, a special exception may be considered by the board of adjustment. Special Exceptions may be granted for the location of towers or antennas in the town subject, however, to the following conditions:
- a. Information required. All applications for a special exception for a tower/antenna shall include the following:
    - 1. Scaled site plan clearly indicating the location, type and height of the proposed tower/antenna, onsite land uses and zoning, adjacent land uses and zoning (including when adjacent to other municipalities), comprehensive plan future land use designation of the site, proposed means of access, setbacks from

property lines, elevation drawings of the proposed tower/antenna and any other structures, topography, parking, and other information deemed by the building official to be necessary to assess compliance with this division.

2. Legal description of the property tract and leased parcel (if applicable).
3. The setback distance between the proposed tower/antenna and the nearest residential unit, platted residentially zoned properties, and unplatted residentially zoned properties.
4. The separation distance from other towers/antennas described in the inventory of existing sites submitted pursuant to subsection (4) shall be shown on an updated site plan or map. The applicant shall also identify the type of construction of the existing tower(s)/antenna(s) and the owner/operator of the existing tower(s), if known.
5. A landscape plan showing specific landscape materials and the parties responsible for maintenance.
6. A description and diagram of the design for the proposed site, tower(s)/antenna(s) and related structures. The design of the site, tower(s)/antenna(s) and related structures shall be of a stealth design, meaning that, to the maximum extent possible, the design shall use materials, colors, textures, screening, and landscaping that will blend the tower/antenna site and structures into the natural setting and surrounding buildings. All designs shall require approval by the town. The town may direct revisions in the proposed design as necessary to protect the public interest.
7. Method of providing a security enclosure and stealth design for the enclosure and, if applicable, illumination including photometrics.
8. A description of compliance with all applicable federal, state or local laws including all provisions within this zoning ordinance.
9. A notarized statement by the applicant's engineer as to whether construction of the proposed tower will accommodate collocation of additional antennas for future users including number, largest size and type.
10. Identification of the entities providing the backhaul network for the tower(s)/antenna(s) described in the application and other cellular sites owned or operated by the applicant in the town and adjacent areas.
- 11.

A description of the suitability of the use of existing towers, other structures or alternative technology not requiring the use of towers or structures to provide the services to be provided through the use of the proposed new tower.

12. The structure is designed to accommodate colocations of equipment and attachments with a minimum wind load rated at 130 mph.
13. That the applicant posts a bond for performance in favor of the town.
- b. Factors considered in granting special exception approval for towers and/or antennas. In addition to any standards for consideration of special exception applications specified in section 66-164 of this Code, the board of adjustment shall consider the following factors in determining whether to approve a special exception:
  1. Height of the proposed tower/antenna;
  2. Proximity of the tower/antenna to residential structures and residential district boundaries;
  3. Nature of uses on adjacent and nearby properties;
  4. Surrounding topography;
  5. Surrounding tree coverage and foliage;
  6. Stealth design of the tower/antenna site and structures, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;
  7. Proposed ingress and egress;
  8. Availability of suitable existing towers, antennas, other structures or alternative technologies not requiring the use of towers or structures;
  9. Set-back distance for a proposed tower equal to at least 110 percent of the height of the tower from any adjoining recreational zoned property lot line and at least 130 percent of the height of the tower from any adjoining residentially zoned property lot line;
  10. Guys and accessory buildings satisfy the minimum zoning district setback requirements;
  11. Existing mature tree growth and natural landforms on the site preserved to the maximum extent possible and additional landscaping to the extent determined reasonably necessary by the board of adjustment to screen the tower from view from residential properties.

- c. All tower and wireless communications antenna owners must comply with the following requirements:
  - 1. All towers and antennas must meet or exceed current standards and regulations of the Federal Aviation Administration (FAA), the Federal Communications Commission (FCC), and any other agency of the state or federal government with the authority to regulate towers and antennas. If such standards and regulations are changed, then the owners of the towers and antennas governed by this ordinance shall bring such towers and antennas into compliance with such revised standards and regulations within six months of the effective date of such standards and regulations. Failure to bring towers and antennas into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owner's expense.
  - 2. The owner of a tower shall ensure the structural integrity of towers and related structures. The tower and structures must be maintained in compliance with standards contained in applicable state or local building codes and the applicable standards for towers that are published by the Electronic Industries Association, as amended from time to time. If, upon inspection, the Building official or his/her designee concludes that the tower or a related structure fails to comply with such codes or standards and constitutes a danger to persons or property, then the owner shall bring such tower or structure into compliance with such codes or standards within 30 days of receiving written notice from the town. Failure to bring such tower or structure into compliance within said 30 days shall constitute grounds for removal of the tower and attached antenna(s) or related structure at the owner's expense.
  - 3. No signs, other than those required by law and preapproved by the town, shall be allowed on a tower, antenna or related structure or enclosure, including fences.
  - 4. Any tower or antenna that is not operated for a continuous period of two years shall be considered abandoned, and the owner of such tower or antenna shall remove same, along with any related structures, with 90 days of receipt of written notice from the town notifying the owner of such abandonment. Failure to remove an abandoned tower or antenna within said 90 days shall be grounds for the town to remove the tower or antenna and any related structures at the owner's expense.



- (6) The term "wireless communications antenna" means any exterior device used in communications that radiates or captures electromagnetic waves, digital signals, analog signals, radio frequencies (excluding radar signals), wireless telecommunications signals or other communications signals. This term does not include over-the-air reception devices which deliver or receive broadcast signals, direct broadcast signals, direct broadcast satellite services or multichannel multipoint distribution services, as defined and regulated by 47 C.F.R. § 1.4000, as amended.

(Ord. No. 04-2, § 1, 8-13-04; Ord. No. 08-4, § 6, 9-5-08)



Sheryl Blasi  
Portfolio Manager  
Network Real Estate

mobile +1 305 849 2071  
sblasi@mobilitie.com

[www.mobilitie.com](http://www.mobilitie.com)

**Bill Thrasher**

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**From:** Sheryl Blasi <SBlasi@mobilitie.com>  
**Sent:** Friday, September 9, 2016 12:14 PM  
**To:** Bill Thrasher  
**Cc:** Michele Visconti  
**Subject:** Town Of Gulfstream - Mobilitie Permit Applicaiton  
**Attachments:** MI90XSR44B\_LUPCOVLET\_20160803\_A.docx

Good afternoon Mr. Thrasher,

I stopped by your office this week so I can introduce myself and set up a day and time we can meet to discuss our proposed ROW/Building Permit application we submitted to the town on August 13, 2016.

Are you available next week for me to come in and discuss? Please let me know if you have a preferred time and day I can come in and meet with you.

Thank you.

**Best Regards,**

Sheryl Blasi | Permitting Manager  
[sblasi@mobilitie.com](mailto:sblasi@mobilitie.com)  
  
Intelligent Infrastructure  
3600 Red Road # 305, Miramar, FL 33025  
mobile: 305 849 2071  
[www.mobilitie.com](http://www.mobilitie.com)

August 3, 2016

The Town of Gulf Stream  
100 Sea Road  
Gulf Stream, FL 33483  
Phone: 561-276-5116

**RE: Mobilitie, LLC Permit Application Submission – (9FLB004271)**

Dear Ms. Tew:

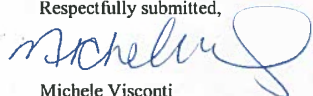
Please find the enclosed Mobilitie, LLC's permit applications for one (1) proposed new utility infrastructure facility in the Town of Gulf Stream. Included with the attached permit applications, you will also find construction drawings and photo simulations for each facility. Please let us know what, if any, permit application fee is required to process these permit applications. Thank you very much for forwarding me the Code of Ordinances earlier today. Pursuant to Gulf Stream Code, Sec. 34-108(3), our infrastructure is an enumerated exception to the underground requirement, and as such permitted to be erected in Gulf Stream. My hope is that a preliminary review of our applications and site plans will allow you to provide us with all requirements needed to obtain a Right-of-Way permit in Gulf Stream. Your email did not contain a permit application, so please let us know if a different application needs to be filled out.

Mobilitie, LLC is a *public utility company* regulated by the Florida Public Service Commission to provide telephone related services, such as facilities based competitive local exchange and interexchange services. To meet the growing demand for connectivity, Mobilitie is deploying a hybrid transport network that provides high-speed, high-capacity bandwidth in order to facilitate the next generation of devices and data-driven services. This network can support a variety of technologies and services that require connectivity to the internet, including, but not limited to, driverless and connected vehicles (commercial, personal and agricultural), remote weather stations and mobile service providers. These transport utility poles and facilities are not dedicated to any particular customer, and, to the extent capacity on the structures is available, are available to be used by other entities, including Gulf Stream.

Mobilitie plans to construct the applied for utility infrastructure within the next 12 months. Mobilitie's hybrid transport network is an industry changing approach that seeks to improve backhaul connectivity for the City's residents. We are excited to work with Gulf Stream and available to answer questions. If you have questions, please contact me at 470-240-3222. Also, please feel free to contact Daniella Bonilla, Permitting Manager, at 904-252-0546. Daniella is local and more than happy to set up an in person meeting to go over any and all additional requirements to obtain a right-of-way permit.

Thank you for your attention to this matter.

Respectfully submitted,



Michele Visconti  
Sr. Network Real Estate Specialist

\*Enclosure

## MOBILITE LLC

## RIGHT OF WAY UTILIZATION APPLICATION

Date Submitted	3-Aug-16			Submitted By	MOBILITE LLC		
JURISDICTION INFORMATION							
Jurisdiction Name	CITY OF HIALEAH						
Address	100 Sea Road	City	Gulf Stream	State	FL	Zip Code 33483	
Jurisdiction Contact	Rebecca Tew	Phone Number	561-276-5116				
APPLICANT INFORMATION							
Applicant Name	MOBILITE, LLC			Utility ID	9FLB004271		
Address	3475 Piedmont Road NE Suite 1000						
City	ATLANTA			State	GA	Zip Code 30305	
Applicant Contact	DANIELLA BONILLA	Phone Number	305 433 0792	Email	Dbonilla@mobilitie.com		
EMERGENCY CONTACT							
Name	Operational Department		Phone Number	877-244-7889			
SITE INFORMATION							
Cascade ID				MOBILITE LLC ID	9FLB004271		
Latitude	26.498553	Longitude	-80.054583	Site Type (Urban, Rural, etc.)			
Address	3737 Gulfstream Road	City	Delray Beach	State	FL	Zip Code 33483	
PROJECT DESCRIPTION							
End user proposes to attach backhaul transport equipment to an existing concrete light pole within an existing right of way.							
Est. Cost of Work	\$4,500						
GENERAL CONTRACTOR							
Contractor Name	Regency Communications			License Number	CGC1503328		
Contact Name	John Jay Pequignot	Phone Number	954-755-8316	Email			
Address	4332 NW 520th Ave						
City	Coral Springs	State	Florida	Zip Code	33065		
ELECTRICAL CONTRACTOR							
Contractor Name	TBD			License Number			
Contact Name		Phone Number		Email			
Address							
City		State		Zip Code			
ARCHITECTURE / ENGINEERING							
Contractor Name	TBD			License Number			
Contact Name		Phone Number		Email			
Address							
City		State		Zip Code			
POWER AND BACKHAUL							
Power Provided By	UTILITY CO. <input type="checkbox"/>	NONE <input type="checkbox"/>	AERIAL <input type="checkbox"/>	TRENCHING <input type="checkbox"/>	BORE <input type="checkbox"/>	OTHER <input type="checkbox"/>	
Utility Provider							
Address				City		State Zip Code	
Telco/Interconnect Requirements	<input type="checkbox"/>	MICROWAVE <input type="checkbox"/>	FIBER OPTICS <input type="checkbox"/>	LICENSED <input type="checkbox"/>	OTHER <input type="checkbox"/>		
Provider							
PERMIT ISSUANCE							
Permit Number				Permit Number			
Permit Fee				Permit Fee			

# SITE ID: 9FLB004271 / M190XSR44B

## GULFSTREAM RD & OLD SCHOOL RD

### DELRAY BEACH, FL 33483

#### GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, TABLE WATER OR WASTE DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

#### SITE INFORMATION

PROPERTY OWNER: PUBLIC RIGHT-OF-WAY  
ADDRESS/CROSS STREET: GULFSTREAM RD & OLD SCHOOL RD  
DELRAY BEACH, FL 33483

APPLICANT: MOBILITIE, LLC

APPLICANT ADDRESS: 3475 PIEDMONT ROAD NE  
SUITE 1000  
ATLANTA, GEORGIA 30305  
PHONE: (313) 638-5400

LATITUDE: N 28° 29' 54" E (28.498553)  
LONGITUDE: W 80° 07' 18.5" E (80.054483)

LAT/LONG TYPE: NAD 83

GROUND ELEVATION: 25' AMSL

COUNTY: PALM BEACH COUNTY

JURISDICTION: GULF STREAM TOWN

#### BEFORE SCALING:

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

#### LOCATION MAPS

##### VICINITY MAP



##### REGIONAL MAP



#### PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON PROPOSED CONCRETE UTILITY POLE WITH AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL PROPOSED BACKHAUL TRANSPORT ON PROPOSED CONCRETE UTILITY POLE

#### CODES

2015 INTERNATIONAL BUILDING CODE  
2014 NATIONAL ELECTRICAL CODE

#### DRAWING INDEX

SHEET NO.	TITLE SHEET	SHEET TITLE
0.0	1.0	SITE PLAN & EXHIBIT PHOTO
2.0	2.1	POLE ELEVATION
3.0	3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	3.1	ANTENNA & EQUIPMENT SPECIFICATIONS
4.0	4.0	ELECTRICAL DETAILS
5.0	5.0	EQUIPMENT & SAFETY LABELS
6.1	6.1	TRAFFIC CONTROL PLAN
6.2	6.2	TRAFFIC CONTROL PLAN
6.3	6.3	TRAFFIC CONTROL PLAN
6.4	6.4	GENERAL NOTES
6.5	6.5	GENERAL NOTES

THESE DRAWINGS ARE BASED ON SITE INFORMATION PROVIDED TO KMB. KMB HAS NOT PERFORMED FIELD VERIFICATION.

#### ARCHITECT/ENGINEER

KMB DESIGN GROUP, LLC  
4800 N. W. 11th Ave., Suite 1200  
WALL, FL 33411  
TEL: (732) 285-5823  
FAX: (732) 285-5860  
www.kmbdc.com

Know what's below.  
Call before you dig.



**mobilitie**

PROJECT NO.: 9FLB004271  
DRAWN BY: RC  
CHECKED BY: SJB

NO. DATE	REVISION
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2	07/26/13
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KMB DESIGN GROUP, LLC  
Stephen A. Bray  
PROFESSIONAL ENGINEER

**PRELIMINARY**  
NOT FOR CONSTRUCTION

FL LICENSE: 68802  
DATE: 07/26/13  
UNLESS NOTED OTHERWISE, THE DESIGN OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER OR REPAIR THE WORK, SHALL BE THE RESPONSIBILITY OF THE LICENSEE.

M190XSR44B  
GULFSTREAM RD  
& OLD SCHOOL RD  
DELRAY BEACH, FL 33483

UTILITY POLE

SHEET TITLE  
TITLE SHEET

SHEET NUMBER  
0.0

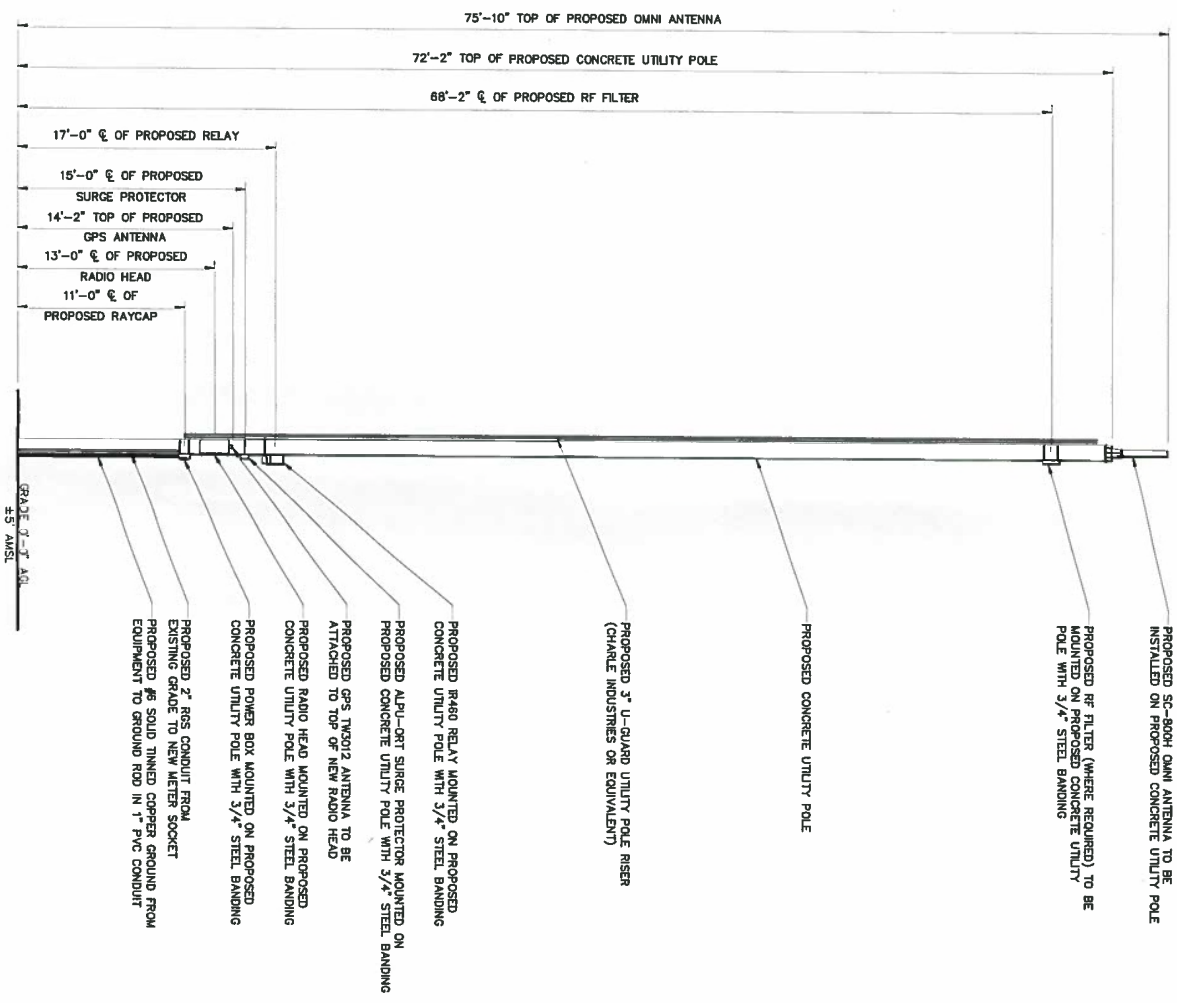








NOTE:  
KMB DESIGN GROUP, LLC HAS NOT PERFORMED A FULL  
STRUCTURAL ANALYSIS ON THE POLE AND MOUNTS AS  
THEY ARE SUBMITTED FOR CONSTRUCTION. THE USER  
REPORT TO SUBMITTER FOR SEPARATE CONSIDERATION  
OBTAINED BY CONTRACTOR PRIOR TO CONSTRUCTION.



1 SOUTHWEST ELEVATION

11417 SCALE: 1/8" = 1'-0"

PROJECT NO. 9FLB004271

DRAWN BY: RC

CHECKED BY: SJB

FL LICENSE 68902

7/8/16

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN FEET AND INCHES. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

**PRELIMINARY**

NOT FOR CONSTRUCTION

MIG0XSR44B

QUILFSTREAM RD

DEL RAY BEACH, FL 33483

UTILITY POLE

SHEET TITLE

POLE ELEVATION

SHEET NUMBER

2.1

**mobilitie**

PROJECT NO. BFLB004271  
DRAWN BY: RC  
CHECKED BY: SJB

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KMB DESIGN GROUP, LLC  
Stephen A. Bray  
PROFESSIONAL ENGINEER

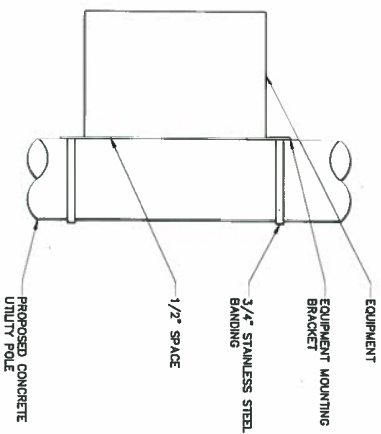
**PRELIMINARY**  
NOT FOR CONSTRUCTION

FL LICENSE 68602  
7/6/16  
UNIT'S AND ARE BEING USED IN THE MANNER OF  
A LICENSED PROFESSIONAL ENGINEER, TO ALTER  
THE DESIGN.

M160XSR44B  
GULFSTREAM RD  
OLD SCHOOL RD  
DELRAY BEACH, FL 33483  
UTILITY POLE

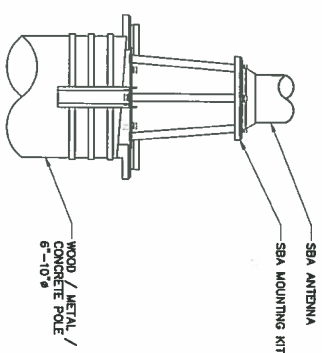
SHEET TITLE  
ANTENNA & EQUIPMENT  
MOUNTING DETAILS

SHEET NUMBER  
3.0



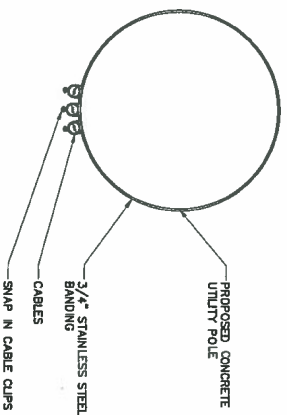
1 EQUIPMENT CONNECTION DETAIL

SCALE: NTS



2 ANTENNA MOUNTING DETAIL

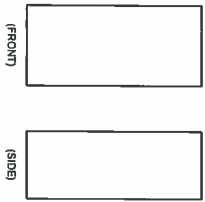
SCALE: NTS



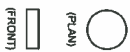
3 CABLE ROUTING DETAIL

SCALE: NTS

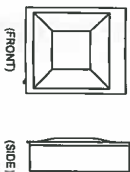
**AH4000**  
**RADIO HEAD**  
 20.1" x 9.1" x 8.9", 55.1 lbs



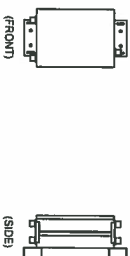
TW3012  
GPS ANTENNA  
0.8" x 2.6"Ø, ±0.3 lbs



**RSTAC-3112-P-120**  
**AC POWER PANEL**  
**9.25" x 9.50" x 3.81**



FIMBW2593S-1C  
RF FILTER  
13.6" x 8.1" x 2.4 ± 77 lbs



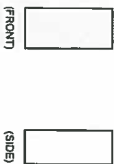
SC-800  
2.5 OMNI ANTENNA  
35.4" x 4.7" Ø, ±11 lbs



**IRELAY 460  
BACKHAUL ANTENNA  
13.0" x 7.9"Ø, ±9.9 lbs**



**ALPU-ORT  
SURGE PROTECTOR  
6.1" x 4.5" x 2.5"**



## ANTENNA SPECIFICATIONS

**SCALE: NTS**

## EQUIPMENT SPECIFICATIONS

SCALE: NTS

## EQUIPMENT SPECIFICATIONS

**SCALE: NTS**

1	EQUIPMENT SPECIFICATIONS
---	--------------------------

**SCALE: NTS**

2	EQUIPMENT SPECIFICATIONS
---	--------------------------

SCALE: NTS

## EQUIPMENT SPECIFICATIONS

SCALE: NTS

4	EQUIPMENT SPECIFICATIONS
---	--------------------------

SCALE: NTS

mobilitie

PROJECT NO :	9FLB004271
DRAWN BY :	RC
CHECKED BY :	SJB

**KMB DESIGN GROUP, LLC**  
**Stephen A. Bray**  
PROFESSIONAL ENGINEER

**PRELIMINARY**  
NOT FOR CONSTRUCTION

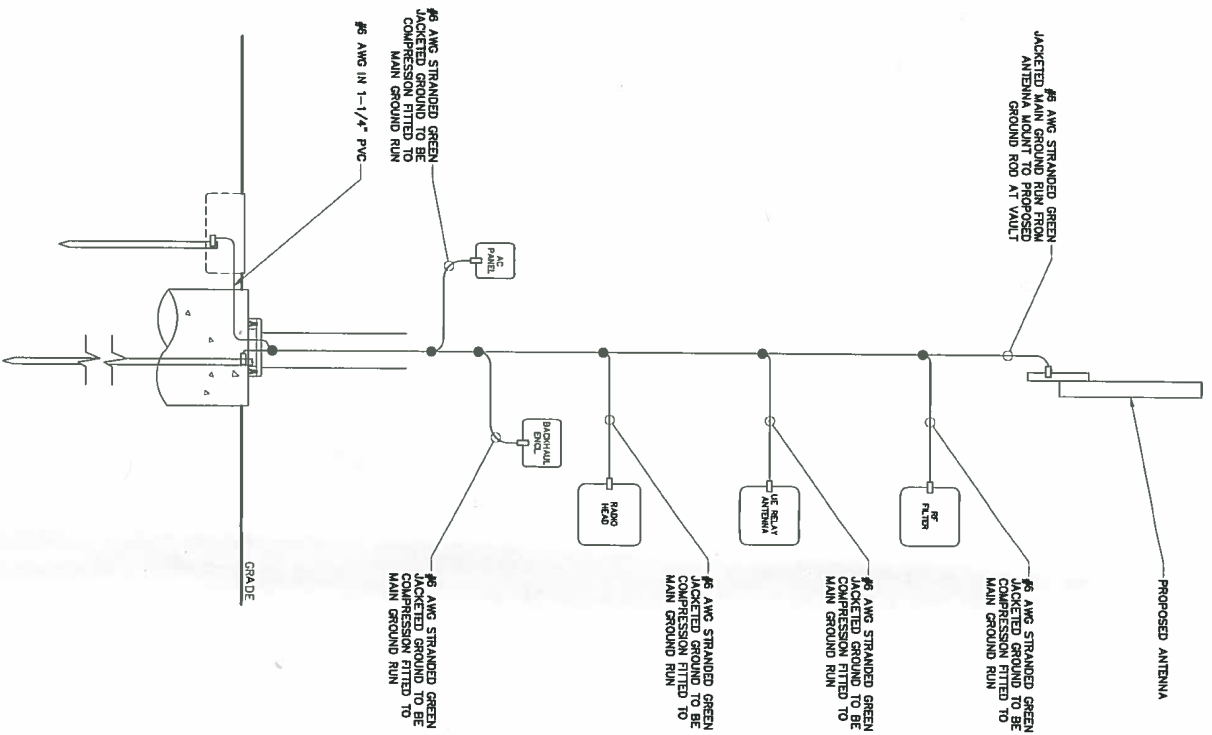
FL LICENSE 68902	7/6/16
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THE REQUIREMENTS OF THE LAW.	

M190XSR44B  
GULFSTREAM RD  
& OLD SCHOOL RD  
DELRAY BEACH, FL 33483  
UTILITY POLE

**SHEET TITLE**  
**ANTENNA & EQUIPMENT**  
**SPECIFICATIONS**

**SHEET NUMBER**  
**3.1**





**NOTE:**  
GROUNDING RISER FOR DIAGRAMMATIC  
PURPOSES ONLY. SEE ELEVATION DRAWING  
FOR EQUIPMENT AND ANTENNA LOCATIONS.

**LEGEND.**

- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

mobilitie

PROJECT NO:	9FLB004271
DRAWN BY:	RC
CHECKED BY:	SJB

[illegible]

**KMB DESIGN GROUP, LLC**  
**Stephen A. Bray**  
PROFESSIONAL ENGINEER

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FL LICENSE 66902 7/6/16

MI90XSRA4B  
GULFSTREAM RD  
& OLD SCHOOL RD  
DELRAY BEACH, FL 33483  
UTILITY POLE

**SHEET TITLE**

**GROUNDING DETAILS**

**SHEET NUMBER**  
**5.0**



PROJECT NO:	9FLB004271
DRAWN BY:	RC
CHECKED BY:	SJB

[illegible]

2	RF/POWER DISCONNECT SIGN
---	--------------------------

1	RF NOTICE SIGN DETAIL
---	-----------------------

3	POLE OWNER SIGN DETAIL
---	------------------------

In case of emergency contact:  
EMAIL: [NOC@BUTILITY.COM](mailto:NOC@BUTILITY.COM)

PHONE: (877) 244-7889

**SITE ID: 9FLB004271**

**SHEET TITLE**  
**EQUIPMENT & SAFETY**  
**LABELS**

SHEET NUMBER

9.0

**KMB DESIGN GROUP, LLC**  
**Stephen A. Bray**  
PROFESSIONAL ENGINEER

**PRELIMINARY**  
NOT FOR CONSTRUCTION

FL LICENSE: 68902

7/6/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER



# TRAFFIC CONTROL NOTES

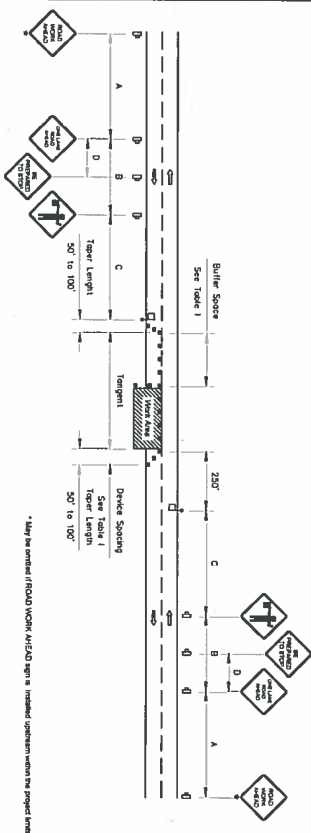
1. Provide for proper drainage, traffic control signs, and ensure that the work area is properly marked.
2. Traffic control devices for lane closure, detour, and other traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD) and shall be maintained in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
3. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
4. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
5. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
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13. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
14. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
15. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
16. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
17. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
18. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
19. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
20. Temporary traffic control devices shall be placed in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).

## TRAFFIC CONTROL NOTES

### SCALE: NTS

#### STANDARD

- 1. Work Area
- 2. Work Area
- 3. Work Area
- 4. Work Area
- 5. Work Area
- 6. Work Area
- 7. Work Area
- 8. Work Area
- 9. Work Area
- 10. Work Area
- 11. Work Area
- 12. Work Area
- 13. Work Area
- 14. Work Area
- 15. Work Area
- 16. Work Area
- 17. Work Area
- 18. Work Area
- 19. Work Area
- 20. Work Area



GENERAL LAYOUT

Minimum Clearance of Obstacle or Structure	Minimum Clearance of Obstacle or Structure	Minimum Clearance of Obstacle or Structure	Minimum Clearance of Obstacle or Structure	Minimum Clearance of Obstacle or Structure
10	10	10	10	10
20	20	20	20	20
30	30	30	30	30
40	40	40	40	40
50	50	50	50	50
60	60	60	60	60
70	70	70	70	70
80	80	80	80	80
90	90	90	90	90
100	100	100	100	100
110	110	110	110	110
120	120	120	120	120
130	130	130	130	130
140	140	140	140	140
150	150	150	150	150
160	160	160	160	160
170	170	170	170	170
180	180	180	180	180
190	190	190	190	190
200	200	200	200	200

CONDITIONS: Minimum clearance of obstacle or structure shall be maintained at all times. The clearance shall be maintained at all times.

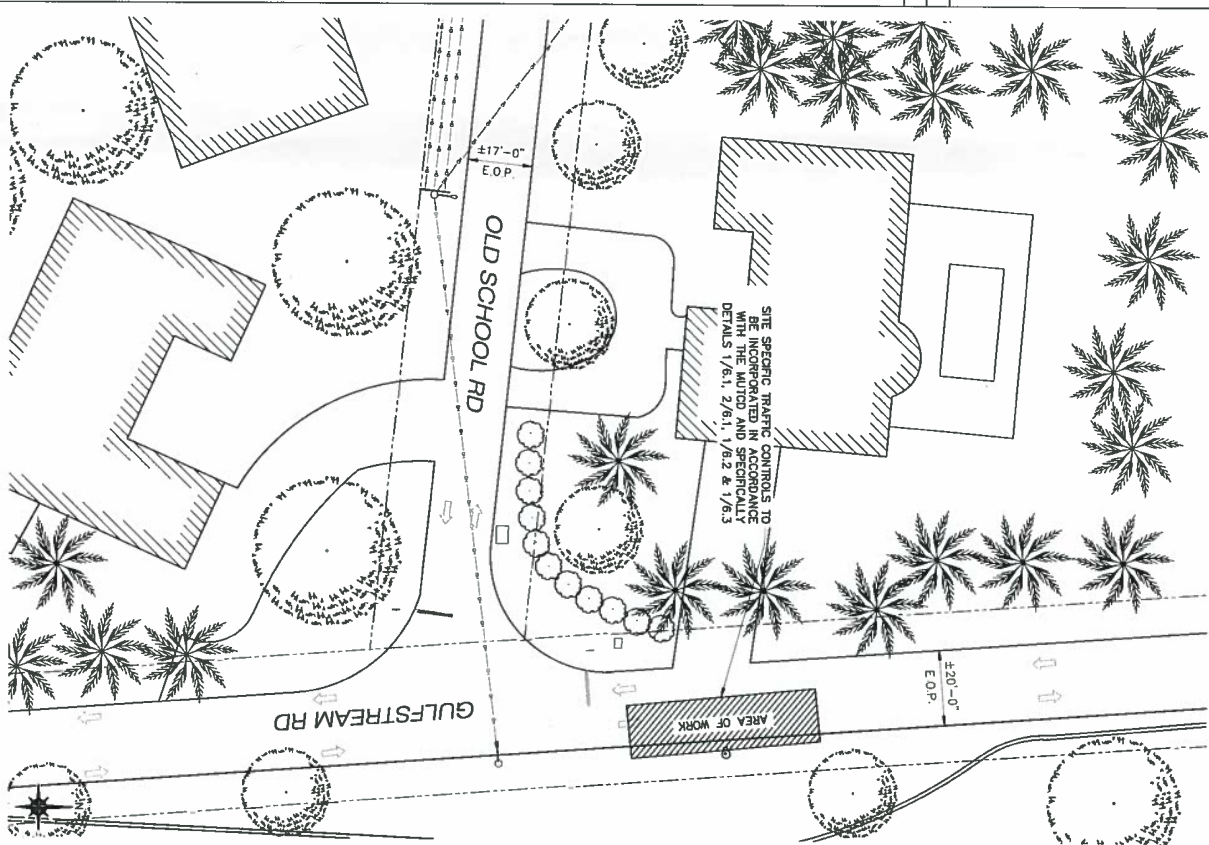
### SCALE: NTS

#### TWO LANE, TWO WAY, WORK WITHIN THE TRAVEL WAY

1. When a lane is closed for work, the work area shall be marked with traffic control devices in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
2. When a lane is closed for work, the work area shall be marked with traffic control devices in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
3. When a lane is closed for work, the work area shall be marked with traffic control devices in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).
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20. When a lane is closed for work, the work area shall be marked with traffic control devices in accordance with the Manual for Uniform Traffic Control Devices (MUTCD).

### SCALE: 1/32" = 1'-0"

#### SITE SPECIFIC TRAFFIC CONTROL PLAN



mobilitie

PROJECT NO: 9FLB004271  
DRAWN BY: RC  
CHECKED BY: SJB

KMB DESIGN GROUP, LLC

Stephen A. Bray  
PROFESSIONAL ENGINEER

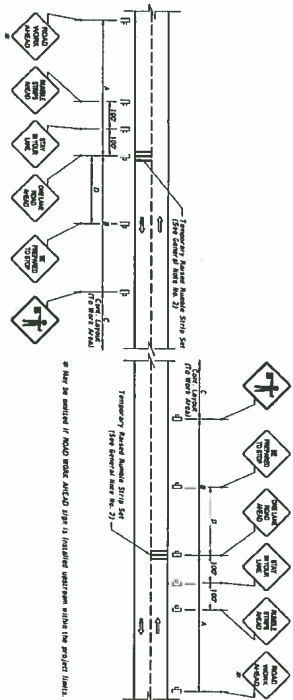
PRELIMINARY  
NOT FOR CONSTRUCTION

FL LICENSE 68602  
7/6/16

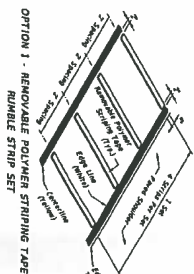
MIDXS44B  
GULFSTREAM RD  
& OLD SCHOOL RD  
DELRAY BEACH, FL 33483  
UTILITY POLE

TRAFFIC CONTROL PLAN

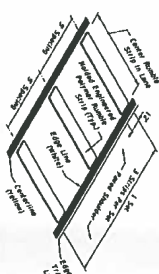
SHEET NUMBER  
6.1



LAYOUT FOR TEMPORARY RAISED RUMBLE STRIPS  
WHEN REQUIRED WITH ADDITIONAL SIGNS



**OPTION 1 - REMOVABLE POLYMER STRIPING TAPE  
RUMBLE STRIP SET**

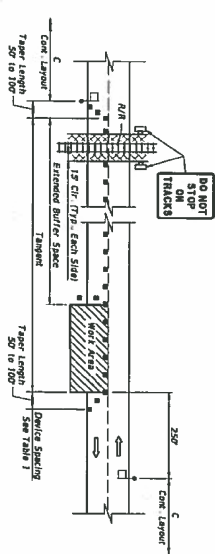


**OPTION 2 - MOLDED ENGINEERED POLYMER  
RUMBLE STRIP SET**

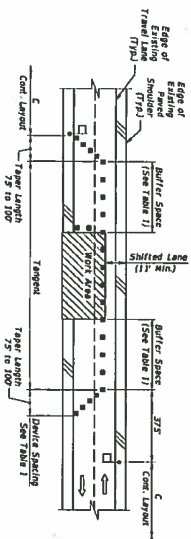
### TEMPORARY RAISED RUMBLE STRIPS

### TEMPORARY RAISED RUMBLE STRIPS

**SCALE: NTS**



### LAYOUT FOR RAILROAD CROSSING BUFFER SPACE EXTENSION

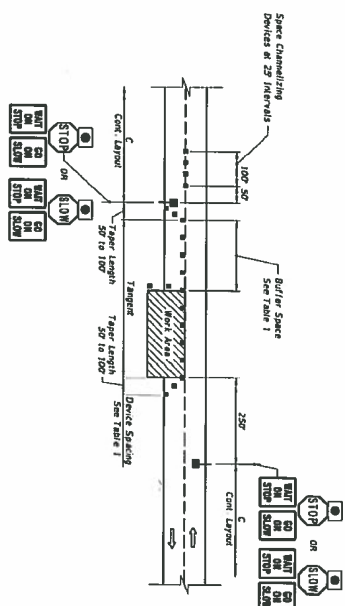


LAYOUT FOR TEMPORARY LANE SHIFT TO SHOULDER WHEN WORK AREA ENCROACHES ON THE CENTERLINE

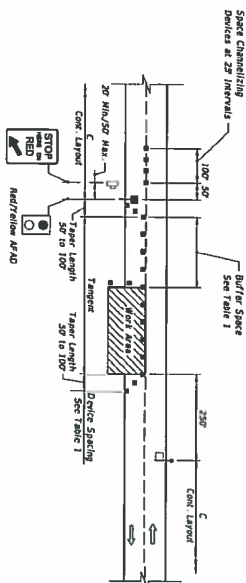
### SPECIAL CONDITIONS

**SPECIAL CONDITIONS**

**SCALE: NTS**



LAYOUT FOR STOP/SLOW AFAD  
METHOD 1 - 2 AFAD'S



LAYOUT FOR RED/YELLOW AFAD  
METHOD 2 - 1 AFAD & FLAGGER

## AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADS)

## AUTOMATED FLAGGER ASSISTANCE DEVICES NOTES

1. Illuminate the logging station when the AFDs are used at night time.
2. When the AFD is not in use, remove or cover caps and move AFD devices outside the clear zone or shield it with a barrier or crash cushion.
3. Daily qualified loggers who have been trained in the operation of the AFDs will operate the AFD. When in use, each AFD method is operated by one person, the driver, the observer, and the logger. The observer is the person who will be responsible for the safety of the crew. The driver is the person who will be responsible for the operation of the AFD.
4. A single logger may simultaneously operate two AFDs. Method 1 or 2 may operate a single AFD on one end of the temporary traffic control zone while the logger is at the opposite end of the temporary traffic control zone. Method 3 or 4 may operate a single AFD on one end of the temporary traffic control zone while the logger is at the opposite end of the temporary traffic control zone. Method 5 or 6 may operate a single AFD on one end of the temporary traffic control zone while the logger is at the opposite end of the temporary traffic control zone.
5. The logger has an unrestricted view of approaching traffic in both directions.
6. Two Method 1 loggers are less than 800 ft apart. For Method 2, the AFD and the logger are less than 800 ft apart.
7. Two Method 3 loggers are less than 800 ft apart. For Method 4, the AFD and the logger are less than 800 ft apart.
8. Two Method 5 loggers are available on-site to provide normal logging operations should an AFD malfunction.

### **AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADs)**

SCALE: NTS



PROJECT NO.	9FLB004271
DRAWN BY:	RC
CHECKED BY:	SJB

[illegible]

KMB DESIGN GROUP, LLC

**Stephen A. Bray**  
PROFESSIONAL ENGINEER

**PRELIMINARY**  
NOT FOR CONSTRUCTION

FL LICENSE: 68902      7/8/16

M190XSR44B  
GULFSTREAM RD  
& OLD SCHOOL RD  
DELRAY BEACH, FL 33483

UTILITY POLE

## TRAFFIC CONTROL PLAN

**SHEET NUMBER**

6.2



PROJECT NO: 9FLB004271  
DRAWN BY: RC  
CHECKED BY: SJB

DATE: 7/26/16
BY: Stephen A. Bray
FOR: KMB DESIGN GROUP, LLC
PROJECT: GUJ FSTREEM RD & OLD SCHOOL RD
SHEET: 6.3

Stephen A. Bray  
PROFESSIONAL ENGINEER  
PRELIMINARY  
NOT FOR CONSTRUCTION

FL LICENSE: 68802  
NOTARY: 7/26/16  
NOTARY: 7/26/16  
NOTARY: 7/26/16

M180XSR44B  
GUJ FSTREEM RD  
& OLD SCHOOL RD  
DE LA VAY BEACH, FL 33483  
UTILITY POLE

SHEET TITLE  
TRAFFIC CONTROL PLAN

SHEET NUMBER  
6.3

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCOACH ON THE PAVEMENT, REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

### CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCOACH ON THE PAVEMENT, REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

### CONDITIONS

### GENERAL NOTES

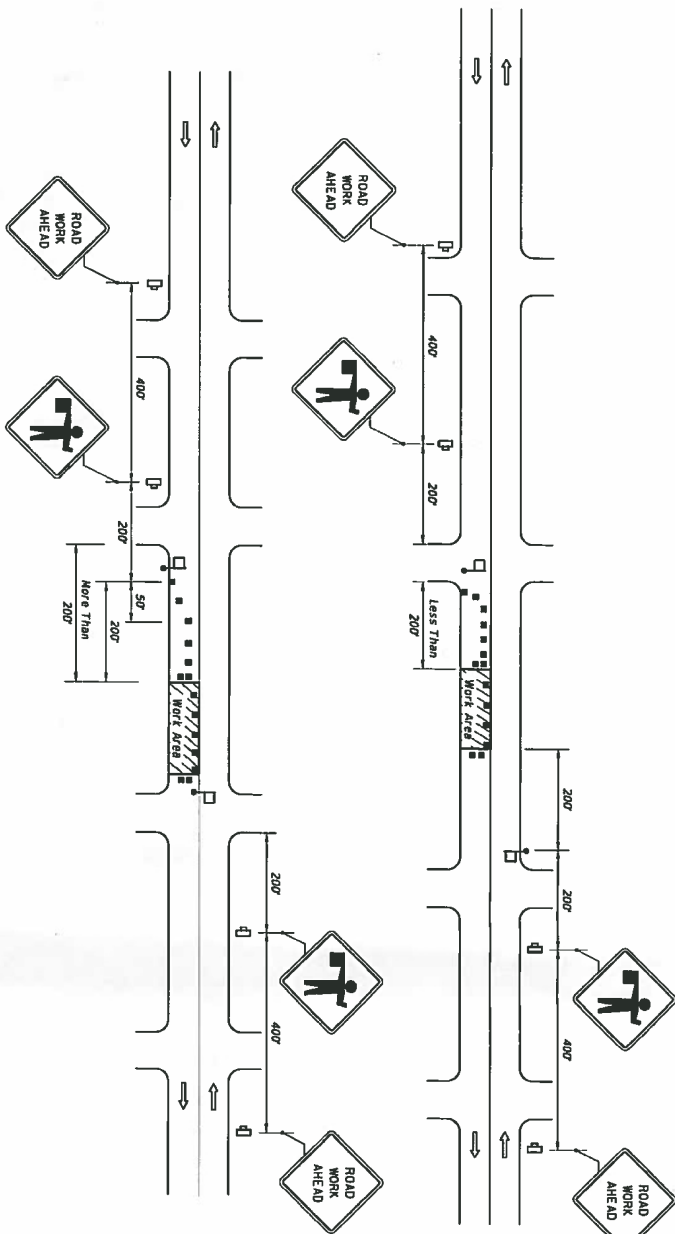
### DURATION NOTES

- SYMBOLS**
- Work Area
  - Channelizing Device
  - Work Zone Sign
  - Flagger
  - Lane Identification + Direction of Traffic

- 1 Work operations shall be confined to one travel lane, leaving the opposing travel lane open to traffic.
- 2 When vehicles in a parking zone block the line of sight to TCZ signs or when TCZ signs encroach on a normal pedestrian walkway, the signs shall be post mounted and located in accordance with MUTCD.
- 3 If work area is confined to an outside auxiliary lane, the work area shall be barricaded and the FLAGGER sign replaced by ROAD WORK AHEAD signs. Flaggers are not required.
- 4 Flaggers shall be in sight of each other or in direct communication at all times.
- 5 The FLAGGER legend sign may be substituted for the symbol sign.

- 6 The maximum spacing between devices shall be no greater than 25'.
- 7 For general TCZ requirements and additional information, refer to MUTCD.
- 8 The two channelizing devices directly in front and directly at the end of it area may be omitted provided vehicles in the work area have high-intensity flashing oscillating or strobe lights operating.
- 9 Use Temporary Raised Rumble Strips in accordance with Index 603. P1 of Rumble Strips and additional signs should begin at FLAGGER sign location.

1. ROAD WORK AHEAD sign may be omitted if all of the following conditions are met:
  - a. Work operations are 60 minutes or less.
  - b. Speed is 45 mph or less.
  - c. No sight obstructions to vehicles approaching the work area for a distance of 600 feet.
  - d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
  - e. Volume and complexity of the roadway has been considered.





## mobilitie

- ## **SERVICE AND DISTRIBUTION**

- POLES, POSTS, AND STANDARDS  
(SINGLE MAST AND SELF SUPPORTING TOWERS)

- A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
- B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE.

(COAXIAL ANTENNA CABLE)

1. GENERAL.
  - A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
  - B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
  - A. COAXIAL CABLE:

- INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
- LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".

4. **COAXIAL CABLE IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLEING.**
  - A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS).
  - B. COAXIAL CABLE IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLEING, PLASTIC TAPS SHALL BE USED AT THE FOLLOWING LOCATIONS:
    - (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED)
    - (WHERE THE COAXIAL CABLE IS CONNECTED TO THE EQUIPMENT)
    - (WHERE THE COAXIAL CABLE IS CONNECTED TO THE ANTENNA)
  - C. USE ANTENNA CABLE TIES (P/N 72290) TO SECURE IDENTIFICATION TAPS TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE THE UNBUILT ANTENNA IDENTIFICATION ASSISTANCE REPAIRS AND PROPERLY IDENTIFY THE ANTENNA IDENTIFICATION TAPS TO THE CONTRACTOR. PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

- [illegible]

- C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "CORRODED" OR APPROVED EQUIV. OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH. ALL GROUND CONDUCTORS SHALL BE STANDARD THINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
- E. LUGS:
1. LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #94-       OR EQUIVALENT
- |    |             |          |
|----|-------------|----------|
| A. | 535 MCN DLO | 548909E  |
| B. | 262 MCN DLO | 548729E  |
| C. | #1/0 DLO    | 548529E  |
| D. | #4/0 THHN   | AND BARE |
| E. | #2/0 THHN   | 548659E  |
| F. | #4 THHN     | 548629E  |
| G. | #6 THHN     | 547079E  |
| H. | #10 DLO     | 547059E  |
- \* WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CAPTIVATOR OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO. 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

PROJECT NO	9F-B00477
DRAWN BY	RCB
CHECKED BY	SJB
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	
PRINTED BY REVIEW	

**KMB DESIGN GROUP, LLC**  
**Stephen A. Bray**  
PROFESSIONAL ENGINEER

**PRELIMINARY**  
NOT FOR CONSTRUCTION

FL LICENSE: 689902      7/6/16

M190XSR44B  
GULFSTREAM RD  
& OLD SCHOOL RD  
DELRAY BEACH, FL 33483

UTILITY POLE

## GENERAL NOTES

**SHEET NUMBER**  
**GN-2**